

Name _____

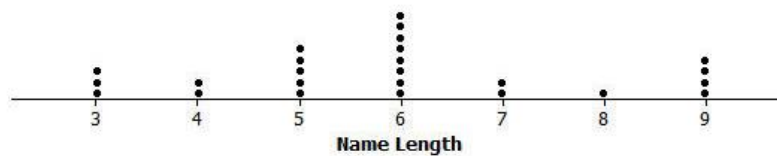
Period _____

1. Indicate whether each of the following two questions is a statistical question. **Explain why or why not.**

a. How much does Susan's dog weigh?

b. How much do the dogs belonging to students at our school weigh?

2. A 6th grade class collected data on the number of letters in the first names of all the students in class. Here is the dot plot of the data they collected:

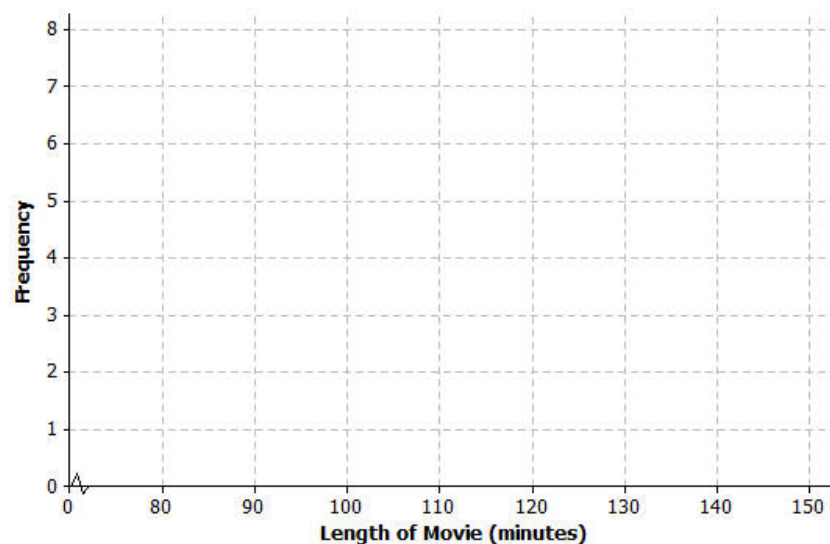


- a. How many students are in the class? _____
- b. What is the shortest name length? _____
- c. What is the longest name length? _____
- d. What is the most common name length? _____
- e. What name length describes the center of the data? _____

3. The frequency table below shows the length of selected movies shown in a local theater over the past six months.

Length of Movie (min)	Tally	Frequency
80–< 90		
90–< 100		
100–< 110		
110–< 120		
120–< 130		
130–< 140		
140–< 150		

- a. Complete the frequency chart.
- b. Construct a histogram for the length of movies data.



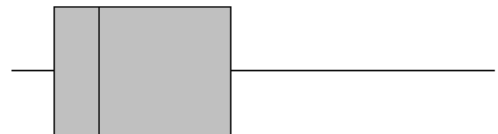
- c. Describe the shape of the histogram. **Explain your answer.**
- d. What does the shape tell you about the length of movies?

4. Suppose the dot plot on the left shows the number of goals a boys' soccer team has scored in 6 games so far this season, and the dot plot on the right shows the number of goals a girls' soccer team has scored in 6 games so far this season.



- What is the mean for goals scored so far for the boys team? Show your work.
- What is the mean for goals scored so far for the girls team? Show your work.
- Is the mean for the girls team or the boys team more “typical” of the data? **Explain your answer.**
- Which dot plot has the larger MAD? Explain how you know.

5. The number of pets per family for students in a sixth grade class is represented in the box plot to the right.



Select **all** the choices below that are true.

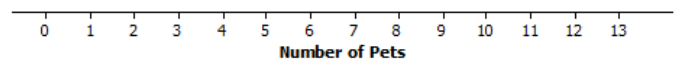
☐ Every family had at least one pet.

☐ About one fourth of the families had six or more pets.

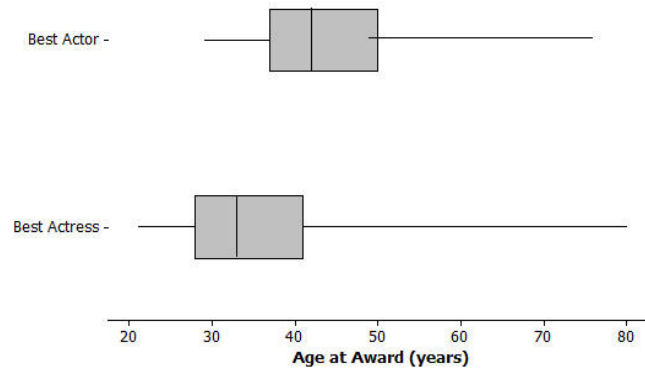
☐ Most of the families had three pets.

☐ Half of the families had five or fewer pets.

☐ Three fourths of the families had two or more pets.



6. The box plots below summarize the ages at the time of the award for leading actress and leading actor Academy Award winners.



Data Source: http://en.wikipedia.org/wiki/List_of_Best_Actor_winners_by_age_at_win
http://en.wikipedia.org/wiki/List_of_Best_Actress_winners_by_age_at_win

- a. Do you think it is harder for an older woman to win an academy award for best actress than it is for an older man to win a best actor award? Why or why not?
- b. The oldest female to win an academy award was Jessica Tandy in 1990 for *Driving Miss Daisy*. How old was she when she won the award? How can you tell?
- c. The 2013 winning actor was Daniel Day-Lewis for *Lincoln*. He was 55 years old at that time. What can you say about the percent of male award winners who were older than Daniel Day-Lewis when they won their Oscar?